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1 **WHAT IS CLAIMED IS:**

1                   1.       A method of removing infectious agents from mammalian soft-tissue,  
2 said method comprising subjecting said soft-tissue to extraction with a medium comprising a  
3 supercritical fluid, thereby removing said infectious agents.

1                   2.       The method according to claim 1, wherein said infectious agent is a  
2 member selected from the group consisting of viruses, bacteria, mycobacteria, fungus,  
3 mycoplasma and prions.

1                   3.       The method according to claim 2, wherein said virus is a member  
2 selected from hepatitis virus, and human immune deficiency virus.

1                   4.       The method according to claim 2, wherein said prions are causative  
2 agents of spongiform encephelopathy.

1                   5.       The method according to claim 1, wherein said fluid is carbon dioxide.

1                   6.       The method according to claim 5, wherein the tissue is treated with  
2 about 100 to about 500 grams of supercritical carbon dioxide/gram of tissue.

1                   7.       The method as claimed in claim 6, wherein the tissue is treated with  
2 carbon dioxide for a period determined as a function of carbon dioxide flow rate in order to  
3 permit passage of about 100 grams to about 500 grams of supercritical carbon dioxide/gram  
4 of tissue.

1                   8.       The method according to claim 7, wherein the tissue is treated with  
2 carbon dioxide for a period determined as a function of carbon dioxide flow rate in order to  
3 permit passage of about 200 grams to about 400 grams of supercritical carbon dioxide/gram  
4 of tissue.

1                   9.       The method according to claim 6, wherein the supercritical carbon  
2 dioxide is applied at a pressure between about  $1 \times 10^7$  Pa and about  $5 \times 10^7$  Pa.

1                   10.      The method according to claim 9, wherein the supercritical carbon  
2 dioxide is applied at a pressure between about  $2 \times 10^7$  Pa and  $4 \times 10^7$  Pa.

- 1                   **11.**     The method according to claim 6, wherein the supercritical carbon  
2     dioxide is applied at a temperature between about 40 °C. and about 55 °C.
- 1                   **12.**     The method of claim 1, wherein said supercritical fluid is selected from  
2     one or more compounds of the group consisting of fluorocarbons, and alkanes.
- 1                   **13.**     The method of claim 12, wherein said fluorocarbons is selected from  
2     one or more compounds of the group consisting of chlorodifluoromethane and  
3     trifluoromethane.
- 1                   **14.**     The method of claim 12, wherein said alkanes is selected from one or  
2     more compounds of the group consisting of ethylene, propane and ethane.
- 1                   **15.**     The method of claim 12, wherein said critical, supercritical or near  
2     critical fluid is selected from one or more compounds of the group consisting of nitrous  
3     oxide, nitrogen and carbon dioxide.
- 1                   **16.**     The method according to claim 1, wherein said animal material is  
2     derived from an organ.
- 1                   **17.**     The method according to claim 1, wherein said mammalian soft-tissue  
2     is nerve tissue.
- 1                   **18.**     The method according to claim 1, wherein said mammalian soft-tissue  
2     is muscle tissue.
- 1                   **19.**     The method according to claim 1, wherein said mammalian soft tissue  
2     is adipose tissue.
- 1                   **20.**     The method according to claim 1, wherein said mammalian soft-tissue  
2     is glandular tissue.
- 1                   **21.**     A method according to claim 1, wherein said mammalian soft-tissue is  
2     epithelial tissue.
- 1                   **22.**     The method according to claim 1, wherein said mammalian soft-tissue  
2     is endothelial tissue.

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1                   **23.**     The method according to claim 1, wherein said mammalian soft tissue  
2     is myocardial tissue.

1                   **24.**     The method according to claim 1, wherein said mammalian soft-tissue  
2     is vascular tissue.

1                   **25.**     The method according to claim 1, wherein said animal material is  
2     lymphatic tissue.

1                   **26.**     The method according to claim 1, wherein said animal material  
2     comprises respiratory tissue.

1                   **27.**     The method according to claim 1, wherein said animal material  
2     comprises digestive tissue.

1                   **28.**     The method according to claim 1, wherein said animal material  
2     comprises sensory tissue.

1                   **29.**     The method according to claim 1, wherein said animal material  
2     comprises urinary tissue.

1                   **30.**     The method according to claim 1, wherein said animal material  
2     comprises reproductive tissue.

1                   **31.**     The method according to claim 1, wherein said method further  
2     comprises adding a modifier or entrainer to said supercritical fluid.

1                   **32.**     The method according to claim 31, wherein said modifier or entrainer  
2     is a surfactant.

1                   **33.**     The method as in claim 31, wherein said modifier or entrainer is water.

1                   **34.**     The method according to claim 31, wherein said modifier or entrainer  
2     is an alcohol.

1                   **35.**     The method according to claim 34, wherein said alcohol is ethanol.

1                   **36.**     The method according to claim 34, wherein said alcohol is n-propanol.

- 1                   **37.**    The method according to claim **31**, wherein said modifier or entrainer  
2    is a ketone.
- 1                   **38.**    A method as in claim **37**, wherein said ketone is acetone.
- 1                   **39.**    A method of treating a mammalian soft tissue with a chemical agent,  
2    said method comprising contacting said tissue with a solution of said chemical agent in a  
3    supercritical fluid.
- 1                   **40.**    The method according to claim **39**, wherein said chemical agent is a  
2    fixing agent.
- 1                   **41.**    The method according to claim **40**, wherein said fixing agent is an  
2    aldehyde.
- 1                   **42.**    The method according to claim **41**, wherein said aldehyde is  
2    glutaraldehyde.
- 1                   **43.**    A method for removing a chemical agent from a tissue following  
2    treatment of said tissue with said chemical agent, said method comprising contacting said  
3    tissue with a supercritical fluid under conditions that remove said chemical agent from said  
4    tissue.
- 1                   **44.**    The method according to claim **1**, wherein said infectious agent is  
2    selected from the group consisting of nucleic acids, lipids, proteins, and polysaccharides.